



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/679,320	10/04/2000	Herschel Clement Burstyn	SAR 13978	7581
35895	7590	03/15/2006	EXAMINER	
INTELLECTUAL PROPERTY DOCKET ADMINISTRATOR GIBBONS, DEL DEO, DOLAN, GRIFFINGER & VECCHIONE 1 RIVERFRONT PLAZA NEWARK, NJ 07102			ARANI, TAGHI T	
			ART UNIT	PAPER NUMBER
			2131	
DATE MAILED: 03/15/2006				

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

09/679,320

Applicant(s)

BURSTYN, HERSCHEL CLEMENT

Examiner

Taghi T. Arani

Art Unit

2131

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 01 December 2005.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-23 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-23 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
- Paper No(s)/Mail Date \_\_\_\_\_.

- 4) ☐ Interview Summary (PTO-413)
- Paper No(s)/Mail Date. \_\_\_\_\_.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_.

Taghi T. Arani  
Examiner  
T. Arani  
318106

**DETAILED ACTION**

1. Claims 1-23 are examined and pending.

Independent claims 1, 13 and 17 are amended.

***Response to Amendment***

2. Applicant's amendment filed 12/01/2005 necessitated the new ground(s) of rejection presented in this Office action. Therefore, applicant's arguments with respect to claims 1-23 have been considered but are moot in view of the new ground(s) of rejection.

Accordingly, THIS ACTION IS MADE FINAL. See MPEP 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. **Claims 1, 5, 10, 11, 12, and 23** are rejected under 35 U.S.C. 103(a) as being unpatentable over Copeland U.S. Patent No. 5,668,303 (prior art of record) and further in view of Yeung et al, US patent 6,668,246.

**Referring to claim 1**, Copeland teaches a method for distorting a recording of projected images, comprising the steps of:

imposing modulated entities on video content of video source material [column 2, lines 18-22];

demodulating the modulated entities [column 3, lines 1-11]; and

projecting the video content to provide the projected images [column 2, line 11-12].

It is noted that Copeland is silent in disclosing that “ the modulated entities being incompatible with the video content” and “wherein the demodulated entities are compatible with the video content”.

However, Yeung et al teach embedding modulated entities being incompatible with the content in an image [col. 6, lines 20-46, i.e. a portion of content may undergo visual/perceptual scrambling for a selected level of access control] and wherein the demodulated entities are compatible with the video content [col. 8, lines 1-21, i.e. before providing the content for playback if decryption keys are properly generated full quality playback of the content is available and ].

It would have been obvious to one of ordinary skill in the art at the time the invention was made to apply Yeung et al's teachings of modulating and imposing incompatible entities while the demodulated entities are compatible with the video content to the method of Copland, such that Copeland's method would be able to establish multiple content protection mechanisms while rendering a full quality of the content to authorized user and preventing the decrypted digitized content from being observed by an unauthorized user or manipulated by a malicious program during playback [Yeung et al., col. 1, lines 24-41, see also col. 6, lines 21-23].

**Referring to claim 5**, Copeland teaches the method of claim 1 further comprising the step of encoding modulation information corresponding to the modulated entities, wherein the projecting step further includes the step of decoding the modulation information [column 3, lines 54-56].

**Referring to claim 10**, Copeland teaches the method of claim 1 wherein the video source material comprises film [column 4, lines 59-63].

Referring to claim 11, Copeland teaches the method of claim 5 wherein the video source material comprises film, the encoding step including storing the modulation information on the film [column 4, lines 54-58].

**Referring to claim 12**, Copeland teaches the method of claim 5 further comprising the step of varying the modulation information with respect to the video source material [column 2, lines 45-47].

**Referring to claim 23**, Copeland teach the method of claim 1 wherein the projecting step includes the further step of imposing a recording device dependent interference on the projected video content [column 2, lines 19-21].

4. **Claims 2-4, and 6-9** are rejected under 35 U.S.C. 103(a) as being unpatentable over Copeland and Yeung et al. as applied to claim 1 above and further in view of Video Scrambling and Descrambling for Satellite and Cable TV to Graf et al (prior art of record).

**Referring to claim 2**, Copeland as modified teach all limitations of claim 2 except wherein the step of imposing modulated entities includes the steps of:

separating the video content into selected colors;

varying at least one of a plurality of parameters of at least one of the selected colors.

However, Graf et al. teach the method wherein the step of imposing modulated entities includes the step of varying at least one of a plurality of parameters of at least one of the selected colors [page 3, Chroma Transmission, lines 3-6].

Graf et al. do not explicitly teach separating the video content into selected colors.

Examiner takes Official Notice that separating the video content into selected colors is conventional and well known.

Therefor, it would have been obvious at the time the invention was made to one of ordinary skill in the art to explicitly employ color separators in Graf et al. since Examiner takes Official Notice that separating the video content into selected colors is conventional and well known.

It would have been further obvious to one of ordinary skill in the art at the time the invention was made to apply Graf et al.'s teachings of modulating to the system and method of Copeland as modified , such that modified Copeland's system would include a color separator with the ability to vary a parameter of a selected color. One would have been motivated to modify the modified Copeland's system as such in order to alter the picture to produce an unwatchable result [page 3, Scanning, lines 16-18].

**Referring to claim 3**, Copeland as modified teach the method of claim 2 wherein the at least one parameter is selected from the group comprising intensity, frequency, gain, brightness, luminance, duty cycle, amplitude, and wavelength [page 3, Chroma Transmission, lines 3-6 of Graf et al.].

**Referring to claim 4**, Copeland as modified teach the method of claim 3 further comprising the step of selecting a space for modulating the video content [column 2, lines 48-61 of Copeland].

**Referring to claim 6**, Copeland as modified teach the method of claim 4 wherein imposing the modulated entities further includes the step of modulating the video in the selected space [column 2, lines 48-61 of Copeland].

**Referring to claim 7**, Copeland as modified teach the method of claim 3 wherein the parameter comprises intensity, the varying step including the step of determining the intensity as a function of position on the video content [page 3, Chroma Transmission, lines 3-5 of Graf et al.].

**Referring to claim 8**, Copeland as modified teach the method of claim 3 wherein the parameter comprises duty cycle, the varying step including the step of determining the duty cycle as a function of position on the video content [column 2, lines 48-61 of Copeland].

**Referring to claim 9**, Copeland as modified teach the method of claim 3 wherein the varying step includes the step of determining a value of the parameter as a function of position on the video content, the function describing a modulation envelope, the modulation envelope decreasing a magnitude of the parameter to correct an alignment error [column 2, lines 45-47 of Copeland].

5. **Claims 13-22** are rejected under 35 U.S.C. 103(a) as being unpatentable over Copeland (U.S. Patent No. 5,668,603, prior art of record) and Yeung et al (U.S. Patent 6,668,246) in view of Guido et al. (U.S. Patent No. 5,924,013, prior art of record).

**Referring to claim 13**, Copeland teach video source material for a projection system, comprising:

modulated entities [column 2, lines 18-22]; and

It is noted that Copeland fails to disclose the modulated entities incompatible with a video content of the video source material; and

selectively deliverable modulation information, wherein the projection system demodulates the modulated entities according to the modulation information and introduces a

Art Unit: 2131

recording device dependent interference, wherein the modulated entities are compatible with the video content

However, Yeung et al teaches modulated entities being incompatible with a video content of the video source material [col. 6, lines 20-46, i.e. a portion of content may undergo visual/perceptual scrambling for a selected level of access control] wherein the demodulated entities are compatible with video content [col. 8, lines 1-21, i.e. before providing the content for playback if decryption keys are properly generated full quality playback of the content is available and ].

Furthermore, Yeung et al teaches a video source material for a projection system, comprising:

selectively deliverable modulation information, wherein the projection system demodulates the modulated entities according to the modulation information and introduces a recording device dependent interference [col. 7, line 55 through col. 8, line 10].

Therefore, It would have been obvious to one of ordinary skill in the art at the time the invention was made to apply Yeung et al's teachings of modulating and imposing incompatible entities while the demodulated entities are compatible with the video content with introduction of a recoding device dependent interference within the system of Copland, such that Copeland's system would be able to establish multiple quality levels at which the content can be projected [ Yeung et al, col. 7, lines 51-54] while preventing the rendered content from being observed by an unauthorized user or manipulated by a malicious program during playback [Yeung et al., col. 1, lines 24-41, see also col. 6, lines 21-23].



**Referring to claim 14**, Copeland as modified teach the video source material of claim 13 wherein the modulated entity is a shape imposed on the video content of the video source material, the shape being color modulated as a function of position on the video content [column 2, lines 48-51 of Copeland].

**Referring to claim 15**, Copeland as modified teach the video source material of claim 14 wherein the function decreases a magnitude of a modulated parameter in proximity to an edge of the shape [column 2, lines 12-14 of Copeland].

**Referring to claim 16**, Copeland as modified teach the video source material of claim 13 wherein the modulated entity includes a spatially modulated entity [column 4, lines 53-57 of Copeland].

**Referring to claim 17**, Copeland teaches a system for distorting a recording of projected images, comprising:

video source material having modulated entities [column 2, lines 18-22]

a projector system responsive to the video source material to provide the projected images, the projector system including:

a modulator responsive to the video source material, the modulator imposing a recording device dependent interference on the projected images [Figure 1, DATA MODULATOR 22].

Copeland (as persuasively argued) does not teach the modulated entities incompatible with a content of the video source material;

Copeland does not teach a system for distorting a recording of projected images, comprising selectively deliverable modulation information; and

the projector system including a demodulator responsive to the video source material for demodulating the modulated entities according to the selectively deliverable modulation information.

However, Yeung et al teaches modulated entities being incompatible with a video content of the video source material [col. 6, lines 20-46, i.e. a portion of content may undergo visual/perceptual scrambling for a selected level of access control] wherein the demodulated entities are compatible with video content [col. 8, lines 1-21, i.e. before providing the content for playback if decryption keys are properly generated full quality playback of the content is available and ].

Furthermore, Yeung et al teaches the projector system including a demodulator responsive to the video source material for demodulating the modulated entities according to the selectively deliverable modulation information [col. 7, line 55 through col. 8, line 10].

Therefore, It would have been obvious to one of ordinary skill in the art at the time the invention was made to apply Yeung et al's teachings of modulating and imposing incompatible entities while the demodulated entities are compatible with the video content in accordance with selectively deliverable modulation information within the system of Copland, such that Copland's system would be able to establish multiple quality levels at which the content can be projected [ Yeung et al, col. 7, lines 51-54] while preventing the rendered content from being observed by an unauthorized user or manipulated by a malicious program during playback [Yeung et al., col. 1, lines 24-41, see also col. 6, lines 21-23].

**Referring to claim 18**, Copeland as modified teach the system of claim 17 wherein the video source material includes film and wherein the modulation information is encoded on the film [column 4, lines 54-63 of Copeland].

**Referring to claim 19**, Copeland as modified teach the system of claim 17 wherein the modulated entities are color modulated and the modulator varies a projection rate of the modulated color [column 4, lines 54-63 of Copeland],

**Referring to claim 21**, Copeland as modified teach the system of claim 17 wherein the projection system includes an electronic projection system and the modulation information includes information downloadable from a remote source [Fig. 2 of Yeung et al].

**Referring to claim 22**, Copeland as modified teach the system of claim 17 wherein the modulation information includes packetized information [column 2, lines 23-26 of Copeland].

6. **Claim 20** is rejected under 35 U.S.C. 103(a) as being unpatentable over Copeland, Yeung et al as applied to claim 17 above and further in view of Video Scrambling and Descrambling for Satellite and Cable TV to Graf et al (prior art of record].

Copeland as modified teach all limitations of claim 20 except wherein the modulated entities are spatial entities, the projection system including:

- a scanner operable to scan a white light strip over a frame;
- a color separator operable to separate the white light strip into color light strips; and
- a separator operable to separate the modulated entities into component colors,

wherein the modulator modulates the component colors of the spatial entities over at least one of the color light strips.

However, Graf et al. teach the projection system wherein the modulated entities

Art Unit: 2131

are spatial entities, the projection system including:

a scanner operable to scan a white light strip over a frame [page 3, Scanning];

a color separator operable to separate the white light strip into color light strips

a separator operable to separate the modulated entities into component colors, wherein the modulator modulates the component colors of the spatial entities over at least one of the color light strips [page 3, Chroma Transmission, lines 3-6].

Therefor, it would have been obvious to one of ordinary skill in the art at the time the invention was made to apply Graf et al.'s teachings of modulating to the modified system of Copeland, such that the modified Copeland's system would include a color separator with the ability to vary a parameter of a selected color. One would have been motivated to modify the modified Copeland's system as such in order to alter the picture to produce an unwatchable result [Graf et al., page 3, Scanning, lines 16-181].

***Action is Final***

7. A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Art Unit: 2131

### Conclusion

Prior arts made of record, not relied upon:

US 5,687,191 to Lee et al.

US 6,400,826 to Chen et al.

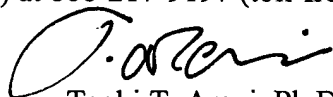
US 6,683,957 B1 to Shin

US 2006/0005029 A1 to petrovic et al.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Taghi T. Arani whose telephone number is (571) 272-3787. The examiner can normally be reached on 8:00-5:30 Mon-Fri.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Ayaz Sheikh can be reached on (571) 272-3795. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Taghi T. Arani, Ph.D.

Examiner

Art Unit 2131

3/08/2006